

That Which is Claimed is:

1. A polymeric composition comprising:

a. a population of polymeric particles, wherein said polymeric particles comprise void-containing rubber portion, wherein the volumetric proportion of the voids defined therein ranges from 1 to 90 percent, wherein the void-containing rubber portion comprises from 20 to 90 weight percent of the individual polymeric particles, and

b. at least one of the following:

1) at least 1 weight percent of a processing oil component;

2) at least 2 weight percent of a processing aid component;

3) at least two different populations of polymeric particles, wherein each has a rubber-containing portion, and wherein the difference between the populations is in at least one of the following areas:

a) the void concentration in the rubber-containing portions of each population,

b) the chemical composition of each population,

c) the average particle size of each population, and

d) the shape of each population; and

4) least one population of polymeric particles having a rubber-containing portion which includes at least one of the following blends:

a) an organosiloxane polymer component and an isobutylene polymer component,

b) a vinyl polymer component and an isobutylene polymer component, and

c) an organosiloxane polymer component, a vinyl polymer component and an optional isobutylene polymer component.

2. A polymeric composition as recited in claim 1, wherein the polymeric composition comprises a processing aid component, and wherein the processing aid component comprises particles having of polymerized units derived from one or more ethylenically unsaturated monomers.

3. A polymeric composition as recited in claim 1, wherein the polymeric composition comprises a processing oil component, and wherein the processing oil component comprises at least one of the following: a polymer which have a weight average molecular weight of less than 5,000 g/mol; an alkylacrylate having an alkyl group containing 12 or more carbon atoms; an ester containing carboxylic acids or alcohols with 12 or more carbon atoms; a vegetable oil; a marine oil; an industrial oil; a palm oil; an animal fat; or a mineral oils.

4. A polymeric composition as recited in claim 1, wherein the polymeric composition comprises at least two different populations of polymeric particles, wherein each has a rubber-containing portion, wherein the difference between the populations is the average particle size of each population, and wherein the average particle size of one population of particles is at least 20 percent larger than the average particle size of the other population of particles.

5. A polymeric composition as recited in claim 1, wherein the polymeric composition comprises least one population of polymeric particles having a rubber-containing portion which includes at least one of the following blends:

- a. an organosiloxane polymer component and an isobutylene polymer component,
- b. a vinyl polymer component and an isobutylene polymer component, and
- c. an organosiloxane polymer component, a vinyl polymer component and an optional isobutylene polymer component

6. A polymeric composition comprising a population of polymeric particles, wherein said polymeric particles comprise void-containing rubber portion, wherein the volumetric proportion of the voids defined therein ranges from 1 to 90 percent, and wherein the void-containing rubber portion comprises from 92 to 100 weight percent of the individual polymeric particles.

7. A polymeric composition as recited in claim 6 further comprising at least one of the following: :

- a. at least 1 weight percent of a processing oil component;
- b. at least 2 weight percent of a processing aid component;
- c. at least two different populations of polymeric particles, wherein each has a rubber-containing portion, and wherein the difference between the populations is in at least one of the following areas:
 - 1) the void concentration in the rubber-containing portions of each population,
 - 2) the chemical composition of each population,
 - 3) the average particle size of each population, and
 - 4) the shape of each population; and
- d. least one population of polymeric particles having a rubber-containing portion which includes at least one of the following blends:
 - 1) an organosiloxane polymer component and an isobutylene polymer component,
 - 2) a vinyl polymer component and an isobutylene polymer component, and
 - 3) an organosiloxane polymer component, a vinyl polymer component and an optional isobutylene polymer component.

8. A thermoplastic resin systems comprising a plastic resin component and an impact modifier component, wherein the impact modifier component comprises a polymeric composition comprising:

- a. a population of polymeric particles, wherein said polymeric particles comprise void-containing rubber portion, wherein the volumetric proportion of the voids defined therein ranges from 1 to 90 percent, wherein the void-containing rubber portion comprises from 20 to 90 weight percent of the individual polymeric particles, and
- b. at least one of the following:
 - 1) at least 1 weight percent of a processing oil component;
 - 2) at least 2 weight percent of a processing aid component;

3) at least two different populations of polymeric particles, wherein each has a rubber-containing portion, and wherein the difference between the populations is in at least one of the following areas:

- a) the void concentration in the rubber-containing portions of each population,
- b) the chemical composition of each population,
- c) the average particle size of each population, and
- d) the shape of each population; and

4) least one population of polymeric particles having a rubber-containing portion which includes at least one of the following blends:

- a) an organosiloxane polymer component and an isobutylene polymer component,
- b) a vinyl polymer component and an isobutylene polymer component, and
- c) an organosiloxane polymer component, a vinyl polymer component and an optional isobutylene polymer component.

9. A thermoplastic resin systems comprising a plastic resin component and an impact modifier component, wherein the impact modifier component comprises a polymeric composition comprising a population of polymeric particles, wherein said polymeric particles comprise void-containing rubber portion, wherein the volumetric proportion of the voids defined therein ranges from 1 to 90 percent, and wherein the void-containing rubber portion comprises from 92 to 100 weight percent of the individual polymeric particles.

10. A thermoplastic resin systems as recited in claim 9, wherein said impact modifier component further comprises at least one of the following:

- a. at least 1 weight percent of a processing oil component;
- b. at least 2 weight percent of a processing aid component;
- c. at least two different populations of polymeric particles, wherein each has a rubber-containing portion, and wherein the difference between the populations is in at least one of the following areas:

1) the void concentration in the rubber-containing portions of each population,

2) the chemical composition of each population,

3) the average particle size of each population, and

4) the shape of each population; and

d. least one population of polymeric particles having a rubber-containing portion which includes at least one of the following blends:

1) an organosiloxane polymer component and an isobutylene polymer component,

2) a vinyl polymer component and an isobutylene polymer component, and

3) an organosiloxane polymer component, a vinyl polymer component and an optional isobutylene polymer component.